

**Form 2 Chemistry  
Scheme of Work  
2018/ 2019 Term II**

Week (Sessions)	Topics/ Objectives	Activities/ Explanatory Notes
<b>1-2 (3)</b>	Return papers and clarify any misconceptions	Teacher will address any problems encountered by students on any topics.
<b>2-3 (3)</b>	<p style="text-align: center;"><b>Mixtures (continued)</b></p> <ul style="list-style-type: none"> <li>-Define: solution, solvent, solute, homogeneous and heterogeneous mixtures, suspension, colloids giving examples</li> <li>- Explain the term saturated, soluble, insoluble, dissolve</li> <li>- List the different types of solutions citing examples (includes: solid/solid; s/l; l/l; l/g; g/g)</li> </ul>	Teacher can demonstrate the formation of some mixtures or students can make them at home.
<b>3-5 (5)</b>	<p style="text-align: center;"><b>Solubility</b></p> <ul style="list-style-type: none"> <li>- Define solubility</li> <li>-Describe the effect of temperature on solubility</li> <li>- Determine temperature or solubility, using solubility curves</li> </ul>	Use solubility curves (multiple curves on the same graph) Students will be required to interpret solubility curves to identify which salt is more/ less soluble
<b>6</b>	<b>Course Work</b>	
<b>7-9 (6)</b>	<p style="text-align: center;"><b>Atomic Structure</b></p> <ul style="list-style-type: none"> <li>-Define: atom, element, molecule, compound</li> <li>- Identify the sub-atomic particles; - Compare their position in the atom, mass and charge (using a table)</li> <li>-Name the first twenty elements of the Periodic table and write their symbols</li> <li>- Learn their atomic #'s</li> <li>-Explain the information the Atomic Number and Relative Atomic Mass gives</li> <li>- Represent the atomic # and mass # of an element (as required by CXC) eg. <math>\begin{matrix} \text{Mass \#} \\ \diagup \quad \diagdown \\ \text{Atomic \#} \end{matrix}</math></li> <li>- Determine the sub-atomic particles using either Mass= protons + neutrons or atomic number for protons and electrons for neutral atoms)</li> <li>- Represent a general structure of the atom (nucleus with p and n and electrons in shells)</li> <li>- State the maximum # of electrons for the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> shell</li> <li>- Draw the complete Atomic Structure of the first twenty elements, writing their electronic configuration.</li> <li>- Define isotopes</li> <li>- Draw the complete atomic structure of isotopes</li> <li>- Determine the Relative Molecular Mass (RMM or <math>M_r</math>) given a formula</li> </ul>	<p>Teachers are expected to teach this topic despite being done in Form 1 since this is an essential foundation topic in Chemistry.</p> <p>Students are required to know the atomic numbers but not the mass numbers.</p> <p>Complete atomic structures can be done for Home- Work and corrected</p> <p>Recognize the chemical properties remain the same for isotopes since chemical reactions depend on the arrangement of electrons which remain the same.</p> <p>State the use of <math>^{14}\text{C}</math> for carbon dating wrt isotopes</p> <p><b>Students, at this level, are not required to know the specific uses for specific isotopes.</b></p> <p><b>Students are Not expected to know the chemical formulae of substances until term III</b></p> <p>Students will not be allowed to use a calculator for determining the <math>M_r</math> of substances.</p>